

**(19) World Intellectual Property Organization
International Bureau**



(43) International Publication Date
6 November 2003 (06.11.2003)

(10) International Publication Number
WO 03/091027 A1

(51) International Patent Classification⁷: B41F 35/00,
31/02

(21) International Application Number: PCT/EP03/03476

(22) International Filing Date: 3 April 2003 (03.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
GE2002A000033 24 April 2002 (24.04.2002) IT

(71) Applicant (for all designated States except US): SCHIAVI S.P.A. [IT/IT]; Strada Bosella, 16, I-29100 Piacenza (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

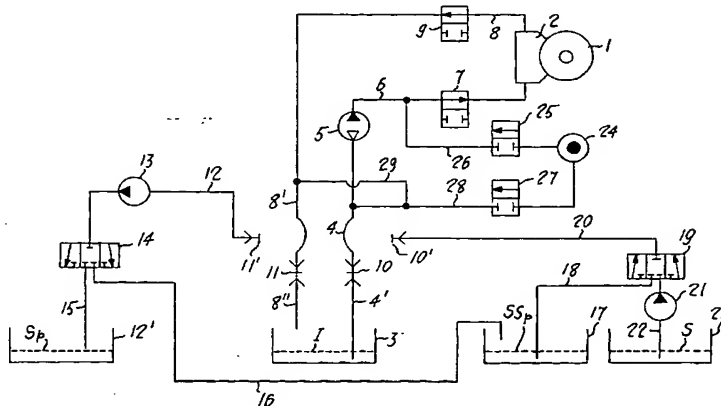
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventor; and

(75) **Inventor/Applicant (for US only):** **BIASINI, Marco**
[IT/IT]; Strada Bosella, 16, I-29100 Piacenza (IT).

(74) Agents: PORSLA, Attilio et al.; Succ.Ing. Fischetti & Weber, Via Caffaro, 3/2, I-16124 Genova (IT).

(54) Title: METHOD FOR AUTOMATICALLY WASHING THE INKING CIRCUIT IN ROTARY PRINTING PRESSES, AND PLANT FOR IMPLEMENTING SAID METHOD



(57) Abstract: The invention relates to a plant for automatically washing the inking circuit in rotary printing presses, comprising a chamber (2) for inking cylinder (1); lines (4', 4, 6, 8, 8', 8'') which connect said chamber (2) to a tank (3) for the ink; means (5) for pumping the ink from said tank (3) via said lines (4' 4, 6, 8', 8'') to a said chamber (2) and from the latter to the tank (3) again; a tank (23) for the clean solvent ; lines (22, 20') provided with means able to connect said tank (23) to said line (4) ; a tank for the dirty solvent (12') and lines (15, 12) provided with means able to connect said tank (12) to said line (8'). According to a main characteristic feature of said plant, the means (5) for pumping the ink consist of a peristaltic pump, the rotor of which is actuated by a motor with a reversible direction of rotation. The invention also comprises a method for automatically washing the inking in rotary printing presses using the abovementioned plant, which method is characterized by the step of intermittently introducing air into the flow of solvent circulated in the lines to be washed, which produces an intermittent acceleration of the body of solvent inside the lines, increasing the action of separation of the ink from the walls of the lines by the solvent.

INTERNATIONAL SEARCH REPORT

Inten Application No

PC1/EP 03/03476

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B41F35/00 B41F51/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B41F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 612 618 A (DEMOORE HOWARD W) 31 August 1994 (1994-08-31) the whole document	1, 13
A	GB 2 332 394 A (ROLAND MAN DRUCKMASCH) 23 June 1999 (1999-06-23) abstract; claims; figure 3 page 9, line 23 -page 10, line 6	1, 13

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

25 July 2003

Date of mailing of the international search report

06/08/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Madsen, P

INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern

Application No

PCT/EP

/03476

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0612618	A	31-08-1994	US	5367982 A		29-11-1994
			CA	2097378 A1		26-08-1994
			EP	0612618 A2		31-08-1994
			JP	6246902 A		06-09-1994
GB 2332394	A	23-06-1999	DE	19757094 A1		24-06-1999